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ABSTRACT

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How Does Encouragement of Invented Spelling Influence Conventional Spelling Development?

by

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B. Kuhn

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AUTHORS: Tiffany Brasacchio, Bonnie Kuhn, and Stephanie Martin

DATE: April 26, 2001

ABSTRACT: A study determined the impact encouragement of invented spelling has on a child's writing through a comparison of writing samples produced by children encouraged to use invented spelling with writing samples by children encouraged to use conventional spelling. Three first grade classes participated in this study, two of which are located in suburban school districts and one in a rural school district. Class sizes ranged from 15 to 25 students and the children were all between the ages of 6 and 7. In each of the three classrooms the teacher implemented the same scripted lesson which encouraged the use of invented spelling. The teachers then implemented a second lesson that required a similar writing task; however, during this lesson the children were strongly encouraged to spell words correctly (conventional spelling). During these lessons the teachers observed the children's spelling techniques and asked some children to talk about the strategies they used to spell the words. Upon collecting all the writing samples, each teacher counted the number of words written as well as how many words were spelled correctly. The results indicated that encouragement of invented spelling does not impact students' abilities to spell more words correctly. Yet, it does appear to allow students to express themselves more freely by using more words in their writing.

How does encouragement of invented spelling influence conventional spelling development?

Spelling instruction is an integral part of written language, yet it is a source of conflict among parents, teachers, administrators, and the general public. Increasing amounts of research is changing the perspectives of teachers as they recognize and gain knowledge about spelling as a developmental process (Gill, 1993). Many of those who support the use of conventional spelling are beginning to see how encouraging invented spelling helps to foster children's spelling skills. However, a debate over spelling instruction continues to loom in the field of education and research. In order to determine the best method of instruction, researchers continue to investigate and collect data on how children's spelling develops and what strategies they use throughout each developmental stage. Many parents question the use of invented spelling. They oppose the use of invented spelling because they feel as if it goes against traditional spelling instruction, which could affect their children's spelling development. Other opponents of the use of invented spelling support parental concerns and feel as if students spelling correctness will falter without traditional instruction. Invented spelling and its acceptance in the school setting are still relatively new. Some questions and concerns surrounding the use of invented spelling are: What are the affects on future spelling correctness, how does it fit into the writing process, and whether or not it has a place in traditional spelling instruction.

Hypothesis

The intent of this study is to determine what impact the encouragement of invented spelling has on a child's writing by comparing creative writing samples produced by children encouraged to use invented spelling with creative writing samples

produced by children encouraged to use conventional spelling. It is hypothesized that children who are encouraged to write using invented spelling will produce longer stories with a significant number of words spelled correctly when compared to writing samples that are completed while students are encouraged to use conventional spelling.

Research Procedures

Each of the three teachers was given the exact same lesson plan to follow for each of the two lessons that were implemented. The two lessons were taught on the Tuesday and Thursday of the given week. Each teacher was required to teach each lesson as the plans directed. One book was chosen for each teacher to read for both lessons. Once the book was read the students were required to write a story from the perspective of one of the main characters. Before the students began the writing task for the first lesson, they were instructed to use their best sounds while spelling. Before the written portion of the second lesson was completed, students were encouraged to do the best spelling possible. However, during this lesson it was stressed that spelling words correctly was an important part of the assignment.

During the writing portion of the lesson, each teacher randomly chose students to explain how or why each of them chose to spell a word in a certain way while completing each of their individual writing samples. The teacher recorded the students' spelling strategies as they were reported. A pie chart was created to have a visual reference to use to show the frequency of use for each spelling strategy. (Appendix A-1 and A-2).

Upon collecting all the writing samples, each teacher counted the number of words written as well as how many words were spelled correctly. Once the numbers were available, a percentage of the number of correct words was figured.

After the calculations were all made, charts were created to study how the use of invented spelling versus conventional spelling affects the number of words written by students. Information was also gathered on whether there was a significant change in the number of correctly spelled words when comparing the writing samples from both lessons.

When the comparisons were completed the teachers then reviewed the spelling strategies data to better understand which type of spelling instruction helps to create more effective spelling strategies. Based on the information gathered, suggestions on spelling instruction will be provided using the data collected.

Instructional Procedures

The research, to support or negate the hypothesis, was conducted in each teacher's classroom. To begin the study, each teacher conducted a lesson which encouraged the use of invented spelling. During February of the 2000-2001 school year, the teachers read to their individual class the story Miss Nelson is Missing by James Marshall. Immediately following this reading, each teacher reviewed with the children the problem and solution found in the story. Each teacher then asked the children what they would do if they were in Room 207. The students in each class then verbally brainstormed their ideas. After brainstorming ideas about what they would do if they were in Room 207, one child in each class was called upon to share out loud the sequence of his/her story idea. This child verbally told the class a new version of the Miss Nelson story with him/her playing the role of a student in Room 207. As the child told his/her story, the teacher assisted him/her by providing prompts and modeling how to think-aloud to guide the student through the structure of the story. Next, the teacher was required to praise all

of the students for their wonderful story ideas that she knew she would be able to read after the children recorded them on paper. The teacher then directed the students to write their stories on the paper provided. Directions were given to write a new story telling about what they would do if they were in Room 207. The students were strongly encouraged to use all of the letters and sounds they knew to write the words as best they can. The children were encouraged to use invented spelling to write their stories. Students were not allowed to use dictionaries, however, they were permitted to use words around the room to help them with their spelling. They children were given as much time as needed to complete their stories. The children then shared their stories with the entire class using the Author's Chair format.

Two days later, another lesson was conducted in all three classrooms; however, this lesson encouraged the use of conventional spelling. The teachers reread aloud the story Miss Nelson is Missing to each class. After reading the story the teachers asked their students what they would do if they were Miss Nelson and had a naughty class. Again, the children in each class verbally brainstormed their ideas and one child was selected to share with the class his/her version of the Miss Nelson story with him/her playing the role of Miss Nelson. The teacher guided the child through this think-aloud activity. The children were then given their assignment to write a new version of the Miss Nelson story with themselves playing the role of Miss Nelson. However, the children were strongly encouraged to do the best they could to spell words correctly. Again, they were allowed to use words around the room as a resource, but not their dictionaries.

Mrs. Brasacchio's Classroom

Mrs. Brasacchio's classroom was located in a suburban school district in a K-5 building. There were a total of 22 children in the classroom, 12 boys and ten girls. All children range in age from six to seven years old. Nineteen out of 22 students participated in the research since two boys and one girl were absent during one of the assessments.

Data Analysis of Mrs. Brasacchio's Classroom

Each student's writing was reviewed and a percentage was calculated to determine his or her spelling accuracy. Individual spelling accuracy in Mrs. Brasacchio's class depicted a difference in performance levels between the invented spelling assessment and the conventional spelling assessment. Four students decreased in spelling accuracy, 12 students increased in spelling accuracy, and three students remained the same between the two assessments.

As a total class, the number of total words written and the number of words spelled correctly decreased during the second assessment when conventional spelling was stressed. Students wrote a total of 962 words when encouraged to use invented spelling, an average of 50.6 words per student. Students spelled 557 of these words correctly, an average of 29.3 words per student. When conventional spelling was stressed, students wrote a total of 862 words, an average of 45.4 words per student. Of this sample, students spelled 523 words correctly, an average of 27.5 words per student. The total number of words written by the class decreased by 100 words an average of five words per student. The number of words spelled correctly decreased by 34 words, an average of 1.8 words per student.

	Total Words	Avg. Words Per Student	Total Correct Words	Avg. of Correct Words Per Student
Invented Spelling	962	50.6	862	45.4
Conventional Spelling	557	29.3	523	27.5

Mrs. Kuhn's Classroom

Mrs. Kuhn's classroom was located in a rural school district in a K-3 building. The 12 participating students receive regular education instruction in a first grade blended classroom with a total of 25 students. Out of the 12 students who participated, there were seven girls and five boys, which range in age from six to seven years old. One male student receives occupational services twice a week for thirty minutes. He is believed to be disgraphic and usually requires the use of an *Alpha Smart* keyboard in order to complete independent writing assignments.

Data Analysis of Mrs. Kuhn's Classroom

Individual spelling accuracy in Mrs. Kuhn's classroom also depicted a difference in performance levels between the two assessments. Between the initial assessment encouraging invented spelling and the second assessment stressing conventional spelling, three students decreased in accuracy, eight students increased in accuracy, and one student remained the same.

As a whole, Mrs. Kuhn's class wrote more words overall and spelled more words correctly when invented spelling was encouraged. During the invented spelling assessment, students wrote a total of 960 words, an average of 80 words per student. In this first sample, 669 words were spelled correctly with an average of 56 words per student. During the second assessment, which stressed conventional spelling, students wrote 806 total words, an average of 67 words per student. In this assessment, the

students wrote 586 words correctly, an average of 49 words per student. The total number of words written in Mrs. Kuhn's class decreased by 154 words when conventional spelling was stressed, an average of 13 words per student. The number of words spelled correctly decreased by 83 words, an average of seven words per student, when conventional spelling was stressed.

	Total Words	Avg. Words Per Student	Total Correct Words	Avg. of Correct Words Per Student
Invented Spelling	960	80	806	67
Conventional Spelling	669	56	586	49

Mrs. Martin's Classroom

Mrs. Martin's first grade classroom was located in a suburban school district, in a K-5 building. The classroom was made up of 15 students, nine boys and six girls. All students were between the ages of six and seven. Fourteen out of 15 students participated in the research; one boy was absent during the initial assessment. Two of the male participants have Individual Educational Programs (IEPs). One is classified as learning disabled and receives direct services for handwriting through occupational therapy. He has been diagnosed with attention deficit disorder, oppositional defiance disorder, and obsessive-compulsive disorder. The other is classified as learning disabled and receives consultant services for writing and language arts; this is his second year in first grade.

Data Analysis of Mrs. Martin's Classroom

Individual spelling accuracy in Mrs. Martin's class also varied in its performance between the two assessments, the initial assessment encouraged invented spelling and the

second assessment stressed conventional spelling. Six students decreased in spelling accuracy, six students increased in accuracy, and two remained the same.

Overall, the students wrote more words when invented spelling was encouraged. In addition, students' spelling accuracy was found to be at a higher percentage when invented spelling was used. There was a three-percent decrease of accuracy when conventional spelling was encouraged. As a class, students wrote a total of 553 words when invented spelling was encouraged, an average of 46 words per student. Students spelled 366 words correctly, an average of 30.5 words per student. When conventional spelling was stressed, the students wrote a total of 271 words, an average of 19 words per student. Students spelled 171 words correctly, an average of 12 words per students. The total word count decreased by 282 words, an average of 27 words per student, when the two assessments were compared. The number of words spelled correctly by the class decreased by 195 words, an average of 18.5 words per student.

	Total Words	Avg. Words Per Student	Total Correct Words	Avg. of Correct Words Per Student
Invented Spelling	553	46	271	19
Conventional Spelling	366	30.5	171	12

Combined Data Analysis All Three Classrooms

After reviewing the compiled data, a noticeable decrease in total word count and correct word count was found in all three classrooms. Together, the three first grade classrooms wrote a total of 2,475 words when students were encouraged to use invented

spelling, an average of 55 words per student. The number of words spelled correctly was 1, 592, an average of 35 words per student. During the second assessment, which stressed conventional spelling, students wrote a total of 1, 939 words, an average of 43 words per student. In the conventional spelling sample, students wrote a total of 1, 280 words correctly, an average of 28 words per student. The comparison between the two assessments showed that students wrote 536 less words when conventional spelling was stressed, an average of 12 words per student. The number of correctly spelled words decreased by 312 words, an average of seven words per student overall.

	Total Words	Avg. Words Per Student	Total Correct Words	Avg. of Correct Words Per Student
Invented Spelling	2,475	55	1,592	35
Conventional Spelling	1,939	43	1,280	28

Conclusions

Encouraging invented spelling does not impact students' abilities to spell more words correctly, but its use does appear to allow students to express themselves by using more words in their writing. The total number of words written increased within an average range of five to 27 more words per student. The data results also indicated that the use of invented spelling did not affect students' spelling accuracy either positively or negatively. For example, the total number of words spelled correctly in both samples varied within a 3% plus or minus range. With these findings, teachers need to feel secure in allowing their students to use invented spelling as long as they continue working toward developing and using a balanced spelling program.

The spelling strategies that students used while completing the writing samples varied a great deal. Sounding words out slowly or in chunks were the two most commonly used spelling strategies. Additional strategies that students used regularly in order to spell words correctly were using the print rich environment, visual clues, applying a vowel rule, remembering a word from small reading groups, and recalling a word from memory or from a text. Along with the most frequently used strategies, students applied other spelling knowledge while completing writing samples. The wide variety of spelling strategies that were used indicates that instruction must be balanced and not *only* depend on word memorization to ensure spelling success.

The information that was gathered from assessing each student's writing samples can be used to plan successful spelling instruction. The samples taken showed that there were patterns in how students spelled some of their words. Frequently students would repeat the spelling of particular words throughout their writing samples, whether accurate or invented. Writing analysis of this type provides the teacher with valuable information and insight into students' writing strengths and needs. Teachers are also able to gather data on students' consistent misspellings. That data allows them to see different strategies that each student uses while spelling and use the information to plan future instruction.

Limitations of the Study

Though every attempt was made to keep the assessments consistent and valid, there are a few factors to keep in mind. The assessments given were derived from the same lesson plan with a scripted outline, however three different teachers in three different classrooms delivered the two lessons. It needs to be taken into consideration that each teacher has her own style and provides the students with different experiences

and set expectations in regards to reading and writing tasks. In addition, each student completing the assessments approached the writing with varied personal experiences and brought different levels of prior knowledge to the text. The assessments were administered on two separate days, and as with all readers and writers, each time a text is read or responded to, the person comes to that task with his or her own daily and past personal experiences. Even though the assessments were given at the same time of day, students completed the task under different personal circumstances on each day; for example one may have been tired one day and not the next.

A longitudinal study would supply more information about students' spelling development. Due to the time constraints of this research, it was not possible to observe each student's spelling over a long period of time. Gathering students' writing samples throughout the first grade year would provide a better picture of the strategies that are used by students as their spelling develops over time.

Review of Literature

Supporters of invented spelling recognizes that spelling is a developmental process that children acquire through writing, which is very similar to the way a child becomes more proficient in oral language. Proponents of invented spelling value students' attempts in writing and spelling approximations. The teacher is the students' guide as they develop their individual spelling abilities. Spelling is a process that students explore as they discover similarities and differences between words using their own attempts and from exposure to print. Invented spelling is often used in whole language classrooms, when the instructor encourages the natural development of spelling as it is made an integral part of reading and writing.

Traditional spelling methods place value on accurate spelling from all students. Spelling is typically taught through drill and practice, memorization, workbook, repetition, word lists, and homework with an emphasis on correctness. Traditional methods frequently have the same weekly format where students memorize lists of words, and spelling skills are taught independently of reading and writing. Each week students are given approximately twenty words to study and memorize for a weekly spelling test. Parents are familiar with the traditional spelling method, as that is how they were taught to spell. Chomsky (1976) and Read (1971), both forerunners in researching how children develop reading and writing skills, have found that children's spelling abilities require a knowledge of phonetics, which is how words are heard. In contrast, traditional beliefs suggest that spelling strategies are based on the children's knowledge of phonics, matching sounds with letters, and their ability to use spelling rules. Read (1976) defines phonology as the "sound system of our language, a system of regular processes that determine the pronunciation of English" (p.1). Invented spelling relies on phonology and provides children with the opportunity to reveal their phonetic knowledge. Chomsky (1976) found that the awareness of phonemes (sounds) is necessary for spelling, and is vital in order to begin any standard spelling program. Cunningham (1982) believes that there is a direct link between invented spelling and a child's knowledge of phonemic awareness and regular phonics patterns. This direct link becomes more obvious during reading and writing assessments. The information gained during assessments can then be transferred to the development of instruction. Gentry (2000) suggests that matching the developmental spelling stages with the timing of phonemic awareness and phonics instruction will create more effective instruction. Educators are

encouraged to explore their students' spelling development, classroom instruction, and its relation to early literacy as well as the encouragement of invented spelling. When attention is given to how words sound rather than spelling correctness, young writers gain more confidence, which encourages them to take risks, and provides them with a creative outlet by allowing them to express themselves freely through their writing.

Creativity becomes the focus of an assigned writing task when students are allowed to use invented spelling. Routman states that the purpose of invented spelling is "to free the kids up to write"(1993, p.37). This does not mean that students are left to spell in any manner that they wish; there are still set expectations that are required to be met by the student while completing each written task. However, the primary purpose of writing is to convey a message, and the use of invented spelling allows students to create a first draft without concentrating heavily on correct spelling, which helps to open the door to a student's creativity. Allowing children to concentrate on the message they are writing with invented spelling provides children with the opportunity and necessity to discover similarities and differences in spelling through their own experiences and examinations (Beers and Beers, 1981). The more writing experiences that are provided, children begin to see themselves as authentic and they begin to place more value on each writing piece. Traditional spelling methods do not provide the same opportunity for students to make their own discoveries during the writing process. Within traditional spelling instruction, words are provided for students to memorize without investigation and ownership is not achieved. Regardless of the spelling program being used in classrooms, the goal is to ensure that all children have the ability to express themselves strongly and effectively through writing (Wilde, 1996). Wilde (1996) states that it is

especially important to encourage invented spelling with young children who have difficulty expressing themselves without its use.

Invented spelling permits children to write freely about their thoughts, feelings and interests as it values their development as writers. Beers and Beers (1981) support invented spelling as it allows children to engage in frequent writing activities, employing spelling strategies they have learned. Spelling instruction needs to be an integrated part of reading and writing, whereas traditional programs typically teach spelling as a separate component. Through integration of spelling within reading and writing instruction, a balance between invented spelling and traditional spelling can be achieved. According to Gentry (2000), creating a balance in the classroom allows students to use their own invented spelling in "authentic meaningful context," while at the same time they are surrounded by correct spelling in their environment. Conventional spelling is found in their texts, on word walls, in environmental print, using letter manipulatives to practice spelling patterns, charts with word families, and individual spelling journals of words spelled correctly. Gentry (2000) and Routman's (1993) research supports using invented spelling with preset expectations for students' writing.

> We need to strive for a balance. By overattending to spelling, students may feel too constrained to write. But by accepting all spelling, even when we know the student can do better, we give the message that spelling is not important. (Routman, 1993, p. 39)

While the use of invented spelling is a significant component of children's spelling development, conventional spelling instruction is necessary to provide children with a balanced spelling program. Children will learn the value of conventional spelling while continuing to use and develop spelling strategies through invented spelling.

Using Invented Spelling

In many of the studies conducted in the areas of invented spelling, researchers have observed children actively engaged in the writing process. Through these observations, researchers found that learning to spell is a developmental process and invented spelling is one of the strategies used by beginning writers. Charles Read, a leading researcher credited with beginning the invented spelling revolution, focused his studies on the invented spelling systems used by pre-school children (Wilde, 1999). He found that children's invented spellings were based on their use of phonology.

> In each case, the child first learned the conventional names of the letters of the alphabet; then with blocks or some other movable-alphabet toy, began to spell words; and finally produced written messages of all kinds, including stories, letters, and poems. The writing began as early as age three and one half, usually before the child was able to read, and certain parts of the spelling system persisted well into the first grade, where they gradually gave way to standard spellings under the influence of formal instruction in reading and writing." (Read, 1971, p.3).

Read observed children as they progressed through different stages of spelling development. Like Chomsky, Read also witnessed children developing as writers prior to learning to read. Read (1971) and Chomsky (1976) found through their research that children develop and use very similar systems in their invented spellings. In later studies conducted by Gill (1997), it was found that children's spelling errors reflect their word knowledge, which is demonstrated in both their word recognition and spelling abilities.

> An understanding of their stage-like progression toward conventional spelling can give teachers invaluable insights into not only what children understand but also what they are going to understand next and how it is that they come to the new awareness. (Gill, 1997, p.4)

Through their observations of children's spelling, researchers have found that the use of invented spelling can be traced, thus showing different stages of development (Read,

1971; Chomsky, 1976; Gill, 1997; Bear & Templeton, 1998). Learning to spell is much like learning to talk; it is developmental, involving multiple attempts and experimentation over time (Routman, 1993; Wilde, 1996; Gill, 1997). Read (1971) and Chomsky (1976) support and maintain the necessity for students to engage in invented spelling and make inferences about their language using their own sound systems. Children's spelling gradually improves and begins to mimic conventional spelling as children learn more about spelling patterns and rules through reading and writing experiences.

Developmental Stages of Spelling

Using these findings as a foundation, developmental stages of spelling evolved. Invented spelling is a natural and significant component of spelling development. Though different researchers have labeled stages of spelling development differently, there are minimal discrepancies between them. Essentially, the above-mentioned researchers agree that children do indeed progress through developmental stages. The various stages of development have many similarities, which provide the observer with a guide for understanding how children use their own individual phonological system. This knowledge of children's progress is revealed through their invented spelling.

Comparison of Gentry (1982) and Bear and Templeton's (1998) Models of Developmental Spelling Stages

Richard Gentry, a prominent researcher in the field of invented spelling, began his research as a result of his own struggles with spelling. Gentry spent much time observing and documenting children's writing, then categorized their development into five stages where upon the Gentry Model of Developmental Stages of Spelling emerged. "Each speller conceptualizes inventing a spelling in qualitatively different ways throughout his

or her spelling development" (Gentry, 2000, p.318). These different strategies used for spelling are reflected in Gentry's five stages of spelling development.

Using the research findings and methods of well known researchers including Read (1971), Chomsky (1976), and Henderson (1980) as a foundation, Bear and Templeton began their research of invented spelling through exploring, observing, and charting children's developmental spelling knowledge. Bear and Templeton initiated their research under the teachings of Henderson. The research conducted by Bear and Templeton suggests children pass through six stages of spelling knowledge.

There are many similarities found within the beginning stages of both Gentry's model and Bear and Templeton's model of developmental spelling. The first three stages of Gentry's model are the precommunicative, semiphonetic, and phonetic. The first three stages of Bear and Templeton's model are prephonemic, semiphonemic and letter name. Gentry's precommunicative stage and Bear and Templeton's prephonemic stage are both in agreement that the child thinks spelling is putting letters together without letter/sound correspondence. In stage two, Gentry's semiphonetic and Bear and Templeton's semiphonemic stages, the child begins to use letter/sound correspondence but is unable to segment all sounds in words. In stage three, Gentry's phonetic and Bear and Templeton's letter name stages, the child represents each phoneme in a word with its corresponding letter and the child is now able to segment most sounds, with the exception of preconsonantal nasals.

However, some discrepancies have been found among the final stages of both models. The final two stages of Gentry's model are transitional and correct (conventional) spelling. In the transitional stage, children use letters, patterns, or letter

sequences they recall from their experiences with print to spell words. The last stage in Gentry's model, the conventional stage, is where children continue to increase their use of conventional spelling as they expand their knowledge of words and patterns. On the other hand, the final stages of Bear and Templeton's model are within-word pattern, syllable juncture, and derivational constancy. In Bear and Templeton's within-word pattern stage children use long vowel patterns, complex single syllable words, and diphthongs in their writing. In the syllable juncture stage they correctly spell words with multiple syllables including prefixes and suffixes. Finally in the derivational constancy stage children are able to correctly spell most words and understand the meanings of words. These children begin to use a variety of words in their writing. Despite the differences, both models agree that syllable and spelling patterns appear in children's invented spelling during these final stages, typically occurring when the child is in first grade and has learned a number of sight words. Though the researchers disagree with details, both argue that spelling is developmental and have created stages with observable spelling behaviors and criteria to follow spelling growth. Gentry believes that further clarification of stages, better communication, and demonstrating a balance of invented and conventional spelling in the classroom will begin to end the controversy. Creating a balance of spelling instruction in the classroom, allows students to use their own invented spelling in meaningful context, while at the same time they are surrounded by correct spelling in their environments. Children's spellings provide insight about what stage and strategies children employ while writing unfamiliar words (Beers & Beers, 1981). It is necessary to encourage writing and using spelling strategies as often as possible, regardless of spelling ability. It is through the children's writing that others can

recognize their knowledge of spelling the children have and what they still need to learn (Beers & Beers, 1981). Teachers can then use the information gathered from each student's work to provide effective, meaningful instruction. Ganschow (1981) states that students' spelling is guided by their knowledge of spelling rules as well as their predictions. By viewing examples of students' writing and comparing them with standard spelling, a teacher can infer what strategies a student has learned and applies to his/her writing as well as spelling rules the student needs to learn and practice.

Balancing Spelling Instruction in the Classroom

Researchers such as Gentry (2000), Templeton (1999), Ehri (1987) and Beers & Beers (1981), have supported that spelling instruction and practice should be provided in the classroom through a variety of avenues. Students must be given frequent opportunities to write and teachers need to provide a variety of purposeful writing experiences, as well as help students to develop a spelling consciousness (Gentry, 1982). For example, students can write letters to peers, family members, or a favorite author. Journals should be made available for students to use during independent and reflective writing. Teachers need to plan writing opportunities within the daily schedule around the students' needs to help them work through the steps of the writing process. When invented spelling is allowed, each of these writing activities encourages risk-taking and gives students a chance to see themselves as authentic writers.

Invented spelling is often a topic of controversy among educators. In a study conducted by Von Lehmden on attitudes of K-6 teachers towards invented spelling, he found that primary teachers are more accepting of invented spelling than teachers of intermediate grades (1993). The primary teachers felt the quantity of the children's

writing would be negatively impacted if invented spelling were not encouraged. Children may resort to writing only words they know how to spell and therefore not writing what would like to write. In contrast, the intermediate teachers felt older students should be able to write most words correctly and therefore these teachers focus on modeling conventional spelling for their students. It was obvious through this study that some intermediate teachers felt that primary teachers were not teaching conventional spelling by encouraging invented spelling. Routman stated, "While students should use invented spelling freely during the primary years, we need to expect most words to be spelled correctly as they get older" (1993, p. 39). "Older children should be inventing only new vocabulary words, uncommon words, and words we wouldn't expect them to be able to spell correctly at their age or grade level" (Routman, 1993, p. 38). Routman suggests using a balanced program. The use of invented spelling allows the children to write more freely, however teachers should hold certain expectations so as to help the children realize spelling is important. Teachers should expect children to spell certain words correctly such as previous spelling words, high frequency words, as well as words with patterns. Even at the first grade level these expectations should be held. In addition, teachers should expect their students to do their best and having certain standards for their writing, so children will be able to take pride in their work (Routman, 1993).

A consistent classroom schedule, teacher support, and a print rich environment are important to helping students feel confident while working on independent writing assignments. A print rich environment allows students to draw from a bank of words as they work to develop writing skills through the use of creative spelling. The words found on charts around the room, word walls, and words presented in interactive writing contain

high frequency words as well as new vocabulary the students can use while writing. Along with the conventional spelling samples that are found around the classroom, teachers can present spelling instruction through word study, patterns found in words, mini-lessons on spelling strategies, and by using individual students' writing samples. "Playing" and working with words through word sorts, building words and word games can also heighten awareness of conventional spelling patterns and spelling rules. While students are manipulating and categorizing words, writing frequently, and developing their sense of voice as a writer, teachers need to continually observe and assess each student's progress. Collecting samples of individual work, listening to students as they explain their spelling strategies, and discussing the results of each word sort are just a few examples of ways that a teacher can gather information about his/her students' knowledge. Ganschow (1981) adds that children's work may provide cues to their strategies and when the teacher knows the strategies of errors they can better plan instruction. The information collected by the teacher can supply him/her with insight into the strategies that are being used during invented spelling. The information can be used to determine how the students' invented spelling strategies fit into the developmental stages, as well as each student's knowledge of conventional spelling. Ganschow (1981) believes that spelling errors are not random mistakes, but they are all based on the rules that students have learned. Once student's samples are collected and analyzed, the teacher can then determine what developmental spelling stage each student is currently working in and apply that knowledge to create spelling instruction as it fits into a school district's regular reading and writing program.

Within a reading and writing program teachers can supplement spelling instruction by providing opportunities for students to develop the concept of a word. Once the concept of a word has been developed, students will begin to make connections between words and spelling patterns. When students participate in open and closed word sorts, they are able to form connections between words and how they work within the alphabetic system. According to Beers and Beers (1981) children need to examine the similarities and differences among *known* written words for growth in their spelling development. As students examine words, they are able to develop hypotheses and apply what they have learned to conventional spelling in their own writing. After analyzing students' word sorts and spelling strategies, teachers can use the information gained to plan for future spelling instruction. Beers and Beers (1981) support the teacher's use of students' work for planning instruction when stating that children need to be encouraged to write often using the spelling strategies they have developed. Teachers analyze each student's spelling strategies that are used in the word sorts and independent writing to place the students at the center of learning and instruction. The information gained is used to plan lessons and develop individual word lists for each student to study. "This child-centered instruction helps children become more proficient spellers, make decisions in their own learning, and develop an interest in learning their language" (Fresch, 1997, p. 30).

At the primary level, students are beginning to display more skills with oral and written language. The use of invented spelling helps students to enhance their knowledge of written words and allows each student to learn words at his/her own developmental spelling stage. Sparking an interest in words and developing orthographic knowledge is

the foundation on which Cunningham's (1992) Making Words activity is built. "Making Words is a powerful activity because within one instructional format there are endless possibilities for discovering how our alphabetic system works" (Cunningham, 1992, p.113). Teachers are able to work with students at different levels with the Making Words activity. The base word that the students are building toward in each lesson can be as simple or difficult as needed for each student's spelling development. When teachers initiate activities like Making Words in a classroom that uses invented spelling, the results encourage not only phonemic awareness for those who lack in it, but also decoding abilities in students who already possess phonemic awareness skills (Cunningham, 1992). Once a Making Words lesson is complete, students should be allowed time to make words on their own with the letters provided from the original set of words. Gentry (1987), Routman (1993), Rivaldo (1994), Heald-Taylor (1998), and Templeton (1999) all support the use of word study activities for building spelling skills and enhancing reading strategies. While making words, students are exploring word patterns and sounds, which research is beginning to discover improves both spelling and decoding skills.

When invented spelling is encouraged and balanced with conventional spelling instruction, an improvement in decoding skills can take place. Cunningham (1991), Routman (1993), and McCormick and Becker (1996) all suggest that the use of invented spelling during writing leads to the chance of having greater success with decoding in reading instruction. A large portion of the instruction needs to be through frequent reading and writing activities. Results of the study by Ehri and Wilce (1987) indicate that there is evidence that learning to spell makes a contribution to reading acquisition among

children who are just learning to read. The study found that the most effective type of instruction included teaching children to spell CVC, CCVC and CVCC nonsense words phonetically. Wilde (1996) suggests that every minute children spend reading is also time spent building their spelling knowledge. With the research support, teachers should be encouraged to fill his/her students' day with meaningful writing and reading opportunities. Routman states that the promotion of invented spelling recognizes and respects that language develops gradually and that learners need lots of time and practice to take risks, make mistakes, and do plenty of reading and writing (1993, p.37). A classroom library with a variety of texts or a browsing basket filled with favorite stories at an independent reading level need to be established and available for students' use, so they can practice their reading skills and gain spelling knowledge. Students will begin to gain visual memory of new words that can be carried over into their writing as they revisit old favorites and books read during guided or shared reading. Even when students are reading independently, they are continuing to build their spelling knowledge, so it is important that teachers plan independent reading time within the daily school schedule.

Once invented and conventional spelling instruction is balanced and lessons are implemented, teachers should soon start to see an improvement in their students' strategies and use of conventional spelling. As observations and analyses of students writing samples are gathered, teachers will be able to continually adjust and build on their spelling instruction. Parents will need to be informed on how spelling instruction will be implemented and monitored, therefore teachers need to make themselves aware of the research that is available to share with parents so that teachers can receive support as they continue to balance invented and conventional spelling instruction.

Addressing Parental Concerns Regarding the Use of Invented Spelling

When parents are introduced to the purpose and benefits of invented spelling, and informed on the teacher's plans on how to place invented spelling into classroom instruction, they are less likely to harbor negative attitudes towards its use in the classroom. "The key to the change in attitude seems to be in demonstrating a balance of encouragement of invented spelling with instruction in conventional spelling" (Gentry, 2000, p. 328). Teachers need to be able to explain to parents how invented spelling is balanced within academic instruction to foster each individual student's writing development. Examples of how conventional spelling instruction takes place within the school year need to be available for the parents. Many parents expect to see a set list of words for their child to study each week. To help them better understand how conventional spelling is being taught in the classroom, teachers need to have specific lessons or word study activities available for parents to review or watch as it takes place within the classroom. An awareness of the developmental stages and strategies that students use while working within the writing process can be enhanced by providing parents with research information and student writing samples that fit within each spelling stage. Once an initial informational meeting takes place, parents can continue to be informed on their child's spelling progress through checking over the school work that is sent home, working in the classroom, or by receiving spelling updates during parent-teacher conferences. Teachers need to make sure that they are up-to-date on each student's spelling progress and that they have student samples to support the results of each spelling analysis. As parents become more aware and involved with their child's

spelling instruction, they will begin to understand and support the work that is conducted within the classroom.

References

Bean, W & Bouffler, C. (1987). *Spell by writing*. Portsmouth, NH: Heinemann.

Bear, D.R. & Templeton, S. (1998). Explorations in developmental spelling: Foundations for learning and teaching phonics, spelling, and vocabulary. *The Reading Teacher, 52,* 222-241.

Beers, C.S. & Beers, J.W. (1981). Three assumptions about learning to spell. *Language Arts, 58,* 573-579.

Chomsky, C. (1976). Approaching reading through invented spelling. *Paper presented at the Conference on theory and Practice of Beginning Reading Instruction* (pp. 57-98). University of Pittsburgh, PA: Learning research and Development Center. (ERIC Document Reproduction Service No. ED 155 630)

Chomsky, C. (1971). Write first, read later. *Childhood Education, 47,* 296-299.

Cunningham, P.M. & Cunningham, J.W. (1992). Making words: Enhancing the invented spelling-decoding connection. *The Reading Teacher, 46*, 106-113.

Ehri, L.C. & Wilce, L.S. (1987). Does learning to spell help beginners learn to read? words? *Reading Research Quarterly, 21*(1), 47-63.

Fresch, M.J. & Wheaton, A. (1997). Sort, search, and discover: Spelling in the child-centered classroom. *The Reading Teacher, 51*, 20-31.

Heald-Taylor, B.G. (1998). Three paradigms of spelling instruction in grades 3 to 6. *The Reading Teacher, 51*, 404-412.

Henderson, E.H. & Beers, J.M. (1980). *Developmental and cognitive aspects of learning to spell: A reflection of word knowledge*. Paper presented at the meeting of the International Reading Association, Newark, Delaware.

Ganschow, L. (1981). Discovering children's learning strategies for spelling through error pattern analysis. *The Reading Teacher, 34, 678*-680.

Gentry, R.J. (2000). A retrospective on invented spelling and a look forward. *The Reading Teacher, 54*, 318-331.

Gentry, R.J. (1987). *Spel is a four letter word.* Portsmouth, NH: Heinemann Educational Books.

Gentry, R.J. (1982). An analysis of developmental spelling in GYNS at WRK. *The Reading Teacher, 36,* 192-200.

Gill, D.A. (1997). The effectiveness of encouraging invented spelling: A research study. (ERIC Document Reproduction Service No. ED 406 645)

Gill, C.H. & Schrader, P.L. (1993, January). *Beyond memorization, lists, and trial tests: Exploring the influence of teacher knowledge of developmental on pedagogical decisions.* Paper presented at the Annual Meeting of the National Reading Conference. (ERIC Document Reproduction Service No. ED 364 870)

McCormick, S. & Becker, E.Z. (1996). Word recognition and word identification: A review of research on effective instructional practices with learning disabled student. *Reading Research and Instruction, 36*, 5-17.

Read, C. (1971). Preschool children's knowledge of English phonology. *Harvard Educational Review, 41*(1), 1-34.

Rivaldo, R. (1994). Invented spelling: What is the problem? The misconceptions of whole language teachers. (ERIC Document Reproduction Service No. ED 384 866)

Routman, R. (1993). The uses and abuses of invented spelling. *Instructor, 102*(9), 36-39.

Templeton, S. & Morris, D. (1999). Questions teachers ask about spelling. *Reading Research Quarterly, 34* (1), 102-112.

Von Lehmden-Koch, C.A. (1993). Attitudes of K-6 teachers towards invented spelling. (ERIC Document Reproduction Service No. ED 357 335)

Wilde, Sandra. (1999). How children learn to spell: Evidence from decades of research. In I. Fountas & G.S. Pinnell (Eds.), *Voices on Word Matter (*pp.173-187). Portsmouth, NH: Heinemann.

Wilde, Sandra (1996). What is our responsibility in helping children to learn to spell? *Primary Voices, K-6, 4*(4), 2-6.

Wilde, Sandra (1996). A speller's bill of rights. *Primary Voices, K-6, 4*(4), 7-10.

Appendix A-1

Invented Spelling Lesson Plan

Writing using Invented spelling Lesson Plan

Objective: After hearing and discussing the story Miss Nelson is Missing, students will write their own version of a Miss Nelson story. Teacher will encourage invented spelling before and during the writing assignment.

Anticipatory set: While in the carpeted area, the teacher will read aloud the story Miss Nelson is Missing, by James Marshall.

Body:
*Once the story is read out loud,

*Teacher will ask the students what they would do if they were in room #_____ and they came in to find Miss Nelson Missing?

*Together, the students will **verbally** brainstorm ideas for new **Miss Nelson** stories. (The story should contain Miss Nelson)

*After several students have shared their ideas with the class, one student will be selected to share out loud the sequence of their story idea. During or after the student retells his/her own story, the teacher will prompt or model through think-aloud to help the selected student with story structure/parts of a story.

Ex:
Student: Miss Nelson was missing one day when I came to school. I was surprised to find her missing . . ..

Teacher: Good story beginning. . . what would you do next?

Student: I would have my friends and I go to see the principal because we didn't have a teacher.

Teacher: This is a good story. You would write. . . One day when I came to school Miss Nelson was missing. I was surprised to find her missing. . . I am anxious to find out how this ends!

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Student: Tries to add to the story to complete the story.

Teacher: Retells the story to model for the class.

*Teacher reminds the students that they had great ideas for stories and that she is eager to hear all of them, so she will be monitoring the room to peek in on their stories.

*Before students are sent back to their seat, briefly remind the students that this is suppose to be a fun story, so she wants them to use all of their sounds when writing out their words. She does not want them to use their dictionaries or her to help them spell, because she wants them to see what wonderful writers they are on their own.

*Any extra questions are answered about the assignment, and the students are sent off to write their stories.

Closure:
Students are called back over to the rug area and they take turns reading their stories to each other using the authors chair.

**If a child wants to make additional editing corrections, he/she may do so after reading the story to the class.
EX: Oops! I forgot the word "the".

Appendix A-2

Conventional Spelling Lesson Plan

Writing with Emphases on Conventional spelling Lesson Plan

Objective: After hearing and discussing the story Miss Nelson is Missing, students will write their own version of a Miss Nelson story. Teacher will encourage invented spelling before and during the writing assignment.

Anticipatory set: While in the carpeted area, the teacher will read aloud the story Miss Nelson is Missing, by James Marshall.

Body:
*Once the story is read out loud,

* Teacher reviews with the students the problem and solution found in the Miss Nelson story.

*Teacher will ask the students what they would do if each of them were Miss Nelson? How would they have handled her problem?

*Together, the students will **verbally** brainstorm ideas for new **Miss Nelson** stories. (The story should contain Miss Nelson)

*After several students have shared their ideas with the class, one student will be selected to share out loud the sequence of their story idea. During or after the student retells his/her own story, the teacher will prompt or model through think-aloud to help the selected student with story structure/parts of a story.

Ex:
Student: Miss Nelson's class was being really bad. They all wouldn't listen to her, so she tried to teach them a lesson.

Teacher: This is a good beginning to a story. Miss Nelson thought she had a nice class, but they started being bad. Miss Nelson thought of a way to teach them a lesson. . . How did YOU as Miss Nelson teach them a lesson?

Student: I made them write 100 times that they will not be bad in school.

Teacher: This is a good story. You would write. . . Miss Nelson thought she had a good class, but they started being bad. Miss Nelson thought of a way to teach them a lesson. She made each student write 100 times that they will not be bad in school. This is a good story, but I want to know how it ends!

Student: Tries to add to the story to complete the story.

Teacher: Retells the story to model for the class.

*Teacher reminds the students that they ***all*** had great ideas for stories and that she is eager to hear all of them, so she will be monitoring the room to peek in on their stories.

*Before students are sent back to their seat, briefly remind the students that this is suppose to be a fun story, so she wants them to use all of their sounds when writing out their words. She reminds them that they can use words around the room to help them spell and that she wants them to try really hard today to do their very best spelling. She states that they might want to hang these up, so correct spelling is really important. They again are not allowed to use their dictionaries or the teacher is not allowed to help them spell, because she wants them to see what wonderful writers they are on their own.

*Any extra questions are answered about the assignment, and the students are sent off to write their stories.

Closure:
Students are called back over to the rug area and they take turns reading their stories to each other using the authors chair.

**If a child wants to make additional editing corrections, he/she may do so after reading the story to the class.
EX: Oops! I forgot the word "the".

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